

Testimony of

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before the

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Good afternoon Chairman Cooper, Ranking Member Lamborn, and distinguished members of the Subcommittee. Thank you for the opportunity to appear before you today to share about NGA's mission and priorities in the space domain.

NGA's Mission and Strategic Context

NGA, with our approximately 15,000 employees, is the nation's primary provider of geospatial intelligence, or GEOINT, which is the use of imagery and geospatial information to describe and depict features, activities, and locations on and about the Earth. We help decision-makers, warfighters and first-responders visualize and understand what is happening at a particular place, at a particular time for decision advantage. Our partners rely on us to "show the way" — literally, to get them from point A to point B, help illuminate options, inform decisions, and carry out actions with precision.

I would like to address a few comments about NGA's approach to the Russia-Ukraine crisis, as it illustrates the current context, GEOINT mission, and the value of space capabilities. NGA is at the leading edge, closely monitoring events in Ukraine and providing mission partners with access to numerous sources of intelligence, including commercial imagery. To meet the moment, NGA is providing Ukraine and other partner nations access to commercial imagery within 100 minutes of collection. In the first two weeks of Russia's invasion of Ukraine, Ukraine's government users streamed or downloaded more than 40 million square kilometers of data. Separately, in support of U.S. government objectives and in coordination with other federal agencies, NGA has publicly released commercial imagery and data throughout the crisis to enhance shared understanding and counter Russian disinformation. NGA also continues to evaluate new commercial GEOINT data and service providers for potential contributions to crisis support.

Focusing on today's space topic, we recognize that changes in the space environment — and our nation's response to those changes — have been on the forefront of both the National Defense Strategy and NGA's own Strategy 2025. These changes represent both opportunities, such as lower cost of entry and the introduction of new technology, and challenges with a more congested operating environment requiring greater space domain awareness.

NGA and our predecessor organizations have a long history of supporting our Nation's space intelligence needs and activities. And, as an organization reliant upon airborne and satellite imagery, we have always made a priority of being aware of activities in space and the associated opportunities and challenges.

At NGA, our efforts are spurred by the same sense of urgency that led to the stand-up of U.S. Space Command and U.S. Space Force. Namely, that Earth's orbit is no longer a benign environment, and the threat to U.S. national security interests from foreign space powers is real and growing. Our adversaries are not standing still, and neither is NGA.

We have arrived at an historic inflection point for our agency, the GEOINT community, and our nation, and our partners and allies. Consequently, in 2020, we rolled out the Moonshot Initiative at NGA, a whole-of-Agency effort to maintain and expand our GEOINT advantage, in all realms — including space. The NGA Moonshot is intended to take all the capabilities that we know we need to develop to maintain GEOINT advantage — specifically, our mission imperatives — and shorten the timeline it takes to complete them. To maintain and evolve GEOINT advantage, we've developed a four-pillar strategy based on people, partnerships, and preparation for the missions of today and tomorrow.

People

NGA's workforce has been thriving in the space domain for decades. In fact, we helped map the moon for the NASA moon landings in the 1960s and '70s.

To maintain a competitive edge, we're increasing our investments in developing our tradecraft and preparing a purpose-built workforce for the space domain. And to fully support our people, it's necessary to train our officers to do many things that dovetail with NGA's modernization initiatives, including big data management and analysis, and growing our artificial intelligence and machine learning expertise.

To grow the space GEOINT talent pool, NGA created a program to teach the geospatial fundamentals of space and counterspace analysis. And in FY21, NGA trained more than 150 DoD, IC, and allied partners in this new space GEOINT program. For FY22, we're on track to train over 300 new students by the end of the year. In FY23, we're offering a follow-on course that will continue to expand DoD's space domain capabilities.

In short, NGA is providing a cadre of experts who can execute warfighter and IC requirements, as well as train and mentor the next generation of space GEOINT professionals.

Partnerships

NGA continues to strengthen our strategic partnerships, while building new relationships within the U.S. government, with industry, and with our Allied partners. As a Combat Support Agency and an element of the Intelligence Community, NGA is diligently working to integrate GEOINT across DoD and the IC, so decision makers have the best available information.

Within the space domain, NRO is our lead partner in advancing space-based GEOINT capabilities, including new commercial sources.

Our partnership with the U.S. Space Force is deepening through information sharing and collaboration. NGA hosted an inaugural summit with the U.S. Space Force in June 2021 that culminated with a signed Memorandum of Agreement establishing the foundation for a productive relationship. In November 2021, we established an NGA Support Team for the U.S. Space Force. This team is responsible for gathering and helping to satisfy new and existing U.S. Space Force GEOINT requirements.

Our NGA Support Team to USSPACECOM, established in 2019, continues to grow and evolve in support of the Command. At USSPACECOM, we've built a "mini NGA" with the authorities to deliver our requirements as a Combat Support Agency and to provide strategic reach-back as a member of the Intelligence Community. Along with our daily intelligence support, our NGA Support Team to USSPACECOM assists the command as it develops sensors and data for the space domain.

We also maintain NGA embedded personnel at other mission partner sites in support of the space intelligence mission, including the National Air and Space Intelligence Center in Ohio and DIA's Missile and Space Intelligence Center in Alabama.

Mission Today: Space Intelligence

Space is vitally important to NGA's mission. It is the environment in which the sensors that provide much of our GEOINT data operate. We recognize that our adversaries and peer competitors have the means to deny us that resource, which could be catastrophic to U.S. operations in all domains, from seabed to space.

NGA's Support Team at USSPACECOM is fully integrated into the Command's intelligence operations and organizational structure. Presently, we account for approximately half of all USSPACECOM's intelligence production and leverage unique capabilities to produce at all security classification levels. Our team also brings functional management authorities and reach-back into the broader GEOINT community.

Mission Tomorrow: Assured Positioning, Navigation, Timing and Targeting

NGA is the global leader in providing geo-sciences data and support for positioning, navigation, timing, and targeting — and the foundation geomatics that underpin it. This work enables the accuracy and precision of DoD weapons systems, Safety of Navigation efforts, and economic and civil applications that use capabilities like GPS and precision timing. Everything that depends on knowing exactly where and when something is on or around the Earth uses this unique form of GEOINT.

Assuring our nation's positioning, navigation, timing and targeting-in peacetime and in conflict-is a mission imperative. As such, NGA is focused on ensuring the integrity and resiliency of these capabilities. In particular, NGA is modernizing our existing tools and systems, revitalizing our infrastructure, and recruiting and training the next generation of geomatics experts. We're also partnering with government, industry, and academia to better collect, transport, and process large volumes of geodetic data, in areas such as Global Navigation Satellite Systems, elevation products, and more.

As we look to the future, including space as an operating area, NGA is exploring expanding existing reference frames for Earth and the space around it.

Moreover, I would like to thank this committee for its support of NGA's Safety of Navigation mission. Your provisions for assured positioning, navigation and timing activities directly support NGA's aeronautical, geomatics and maritime navigational safety responsibilities in the air, land, sea and space domains.

Conclusion

NGA continues to grow and evolve its space intelligence mission through people, partnerships, and capabilities to meet current and future customer needs. We will continue to have a vested interest in the space domain, as much of our overall GEOINT mission is enabled by data from space systems.

Thank you, and I look forward to answering your questions.

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